

  
HTGR  
Simple Safe Secure

## HTGR Technology Working Group

2017 Accomplishments and 2018 Plans

HTGR TWG Members  
BWXT  
Framatome (previously AREVA)  
Kairos Power  
StarCore Nuclear  
X-Energy  
Duke Energy, EPRI and NEI

Farshid Shahrokhi (Chairman HTGR-TWG)

2018 Regulatory Information Conference  
Session: TH31- Advanced Reactors – Technical Readiness Activities

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## HTGR- TWG

Members

- Reactor Developers
  - Framatome
    - SC-HTGR - prismatic core modular high temperature gas-cooled reactor
  - Star Core Nuclear
    - StarCore - small core modular high temperature gas-cooled reactor
  - X-Energy
    - Xe-100 - pebble bed core modular high temperature gas cooled reactor
  - Kairos Power
    - KP-FHR - molten salt core high temperature reactor
- Fuel Manufacturer
  - BWXT
    - UCO based TRISO coated particle fuel

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## HTGR-TWG

Scope of Activities

- **As a working group we ----**
  - Advocate for completion of the AGR and AGC research programs
  - Support consensus standards development (ANSI, ANS, ASME, etc.)
  - Support the NRC's non-LWR regulatory process improvement efforts
  - Engaged in DOE's NEAMS Codes and Methods activities
  - Continue our participation in the NEI Advanced Reactor working group and its Technology, Legislative, Security, and Regulatory Task Forces
  - Engage with the NEI's Adv. Rx and SMR cross-cutting issue resolution, e.g. Staffing, EP, and Security
- **Separately we ---**
  - Continued our design development activities
  - Monitor DOE funding opportunities and GAIN initiatives
  - Engage investor communities and customers
  - Developing our individual REPs (regulatory engagement plans)

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## HTGR –TWG

### 2017 Accomplishments



1. Jan. 2017 - Formed our TWG
2. Feb. 2017 Documented our R&D needs
3. Actively engaged with EPRI Advanced Reactor Working Group
  - Advanced Reactor Owners Requirements Guide
4. Participation in NEAMS Industry Council
5. Participating in NEI Advanced Reactor Technology and Regulatory Task Forces
  - Reviewed and comments LMP white papers on SSC classification, LBE selection and DID
6. Issued multiple letters of support for continued R&D funding for TRISO Coated Particle Fuel and Nuclear grade Graphite R&D
7. Attended NRC's Standards Forum and DOE fuel workshops
8. Launched preparation of a Limited Scope Topical Report (LSTR) for TRISO Coated Particle fuel Qualification
9. Encouraged ASME to seek NRC endorsement of Section III, Div. 5 rules for high temperature reactors

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## HTGR –TWG

### 2018 - Plans



- Continue advocacy for completion of DOE AGR and AGC programs
- TRISO Coated Particle Fuel Limited Scope Topical Report (LSTR)
  - Complete the report
  - Submit to the NRC
  - Begin NRC review/comment
- ASME Section III, Div. 5
  - Advocacy for NRC review and endorsement
  - Technical support of the NRC review and comments resolution
- Engage and support DOE NEAMS activities
- Engage and support EPRI and NEI advanced reactor working groups and task forces

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